

NEW HOST ASSOCIATIONS FOR CERAMBYCIDAE
(COLEOPTERA) FROM SELECTED SPECIES OF
LEGUMINOSAE AND RUTACEAE

MARLIN E. RICE

Department of Entomology, Kansas State University,
Manhattan, Kansas 66506

Abstract.—Twenty-four new cerambycid host associations are reported from southeastern Texas. Specimens were reared from *Cercis canadensis*, *Sesbania drummondii*, *Sophora secundiflora*, *Zanthoxylum clava-herculis*, and *Zanthoxylum fagara*. *Plectromerus dentipes* is recorded for the first time from Texas.

The Cerambycidae of Texas have been intensively studied during the past decade (see Hovore and Giesbert, 1976; Hovore et al., 1978; Turnbow and Wappes, 1978, 1981; Hovore and Penrose, 1982; and Rice et al., 1985). Data from these observations have focused primarily on larval and adult host associations and geographical distributions.

This study reports 24 new larval cerambycid host associations from southeastern Texas and one new state record. Three species of Leguminosae; *Cercis canadensis* L., *Sesbania drummondii* (Rydb.) Cory, and *Sophora secundiflora* (Ort.) Lag. ex DC. and two species of Rutaceae; *Zanthoxylum clava-herculis* L. and *Zanthoxylum fagara* (L.) Sarg. were specifically selected for this study. No cerambycids have been reported from *S. drummondii* or *S. secundiflora*. *Zanthoxylum* was selected because of the numerous beetle species that are known to use it as a host, including the recently described *Nathriobrium methioides* Hovore.

Many cerambycid species are opportunistic, with ovipositing females attracted to injured, dying, or dead woody perennials. After the eggs are laid in a plant, the xylophagous larvae usually are restricted to the internal cortex and/or subcortical layers of the host. This aspect of cerambycid biology permits the infested hosts to be collected and stored in individual rearing containers, so the adult beetles can be collected as they emerge. Specific larval host associations for the emerging species then can be determined. Listed below are host plants, the associated cerambycids, the date(s) of emergence, and the location where the host was collected. Insect specimens are in the collection of the author.

Cercis canadensis

Plectromerus dentipes Olivier from Wharton Co., Wharton, 7/22-VI-84. Six specimens emerged from this host and represent a new state record. The species has previously been reported from Florida to Louisiana (Linsley, 1963).

Obrium maculatum (Olivier) from Wharton Co., Wharton, 7-VI-84.

Ecyrus arcuatus Gahan from Wharton Co., Wharton, 17-IV-84.

Sesbania drummondii

Obrium maculatum (Olivier) from Aransas Co., Aransas Nat'l. Wildlife Refuge, 7-IV-84 through 17-V-84 and Matagorda Co., 2 mi SE Blessing, 12-IV-84 through 3-V-84.

Eburia mutica LeConte from Matagorda Co., 2 mi SE Blessing, 7-VIII-84.

Anelaphus inermis (Newman) from Matagorda Co., 5 mi N Markham, V-83 and Wharton Co., 1 mi NW Wharton, 3-V-84.

Elaphidion mucronatum (Say) from Matagorda Co., 2 mi SE Blessing, 19-IV-84 through 31-V-84.

Dendrobias mandibularis Serville from Matagorda Co., 2 mi SE Blessing, 4-XI-83.

Aegomorphus modestus (Gyllenhal) from Matagorda Co., Clemville, 15/17-V-84.

Ecyrus arcuatus Gahan from Matagorda Co., 2 mi SE Blessing, 19-IV-84 through 29-VI-84.

Sternidius mimeticus (Casey) from Matagorda Co., 2 mi SE Blessing, 4-XI-83.

Sternidius texanus (Casey) from Aransas Co., Aransas Nat'l. Wildlife Refuge, 7-IV-84 through 17-V-84 and Matagorda Co., 2 mi SE Blessing, 12-IV-84 through 3-V-84.

Styloleptus b. biustus (LeConte) from Matagorda Co., 2 mi SE Blessing, 4-XI-83 and 19-IV-84.

Leptostylus transversus dietrichi Dillon from Matagorda Co., 2 mi SE Blessing, 7-VIII-84 through 15-XI-84.

Sophora secundiflora

All specimens reared from this host were collected from Calhoun Co., 1.8 mi E Point Comfort along a roadside.

Eburia mutica LeConte, 7-V-84 through 29-VI-84.

Anelaphus m. moestus LeConte, 29-VI-84.

Neoclytus a. acuminatus (Fabricius), 7-IV-84.

Ataxia crypta (Say), 17-V-84.

Sternidius texanus (Casey), 29-IV-84.

Zanthoxylum clava-herculis

Eburia mutica LeConte from Wharton Co., 1.7 mi N Wharton along Peach Creek, 3-IX-84.

Rhopalophora rugicollis (LeConte) from Wharton Co., 1.7 mi N Wharton along Peach Creek, 20/29-IV-84.

Sternidius texanus (Casey) from Jackson Co., 7 mi S Ganado, 12/30-V-84.

Zanthoxylum fagara

Eupogonius pauper LeConte from San Patricio Co., Lake Corpus Christi State Park, 22-VI-84 through 3-IX-84.

Leptostylus transversus dietrichi Dillon from San Patricio Co., Lake Corpus Christi State Park, 14-VIII-84 through 2-XI-84.

ACKNOWLEDGMENTS

Thanks to Frank Hovore, Hugh Thompson, and Robert H. Turnbow for reviewing and suggesting improvements on the original manuscript. A scientific study permit for Lake Corpus Christi State Park was granted by the Texas Parks and Wildlife Department. This is contribution 85-386-J from the Kansas Agricultural Experiment Station.

LITERATURE CITED

- Hovore, F. T. and E. F. Giesbert. 1976. Notes on the ecology and distribution of western Cerambycidae (Coleoptera). *Coleop. Bull.* 30:349-360.
- Hovore, F. T. and R. L. Penrose. 1982. Notes on Cerambycidae co-inhabiting girdles of *Oncideres pustulata* LeConte (Coleoptera: Cerambycidae). *Southwest. Nat.* 27:23-27.
- Hovore, F. T., R. L. Penrose and E. F. Giesbert. 1978. Notes on North American Cerambycidae (Coleoptera). *Entomol. News* 89:95-100.
- Linsley, E. G. 1963. The Cerambycidae of North America. Part IV. Univ. Calif. Publ. Entomol., 165 pp.
- Rice, M. E., R. H. Turnbow, Jr. and F. T. Hovore. 1985. Biological and distributional observations on Cerambycidae from the southwestern United States. *Coleop. Bull.* 39: 18-24.
- Turnbow, R. H., Jr. and J. E. Wappes. 1978. Notes on Texas Cerambycidae (Coleoptera). *Coleop. Bull.* 32:367-372.
- Turnbow, R. H., Jr. and J. E. Wappes. 1981. New host and distributional records for Texas Cerambycidae (Coleoptera). *Southwest. Entomol.* 6:75-80.

Received January 29, 1985; accepted May 29, 1985.